UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

VIVIAN BERT, et al.,	:	Case No. C-1-02-467
Plaintiffs,	:	Judge Beckwith
v.	:	
AK STEEL CORPORATION,	:	DECLARATION OF LUCY GIBSON, PH.D.
Defendant.	:	

Lucy Gibson, Ph.D. truthfully declares that she is competent to testify if called and she further truthfully states with her own personal knowledge as follows:

1. I am the Executive Vice President of Resource Associates, Inc. I received my Ph.D in Industrial Organizational Psychology in 1987 from the University of Tennessee. I am a licensed psychologist in the State of Tennessee. I have almost 20 years of experience developing and validating employment selection tests.

2. Resource Associates, Inc., the company that I co-founded, specializes in assisting employers with selection testing.

3. In 1997, AK Steel hired Resource Associates, Inc. to develop a new pre-employment test that would accurately predict future performance on its entry-level laborer job and assist it in hiring the high-quality employees that AK Steel's hazardous and demanding work environment required.

4. In order to develop an appropriate test for AK Steel, my staff and I conducted a job analysis. We conducted interviews with both entry level employees and managers at AK Steel about the responsibilities, aptitudes and behaviors required of employees throughout the plant. We also toured the plant and observed the employees perform their jobs. It was my understanding that entry level employees were assigned to work in all parts of the plant and due to collective bargaining agreement requirements, could be assigned to do any hourly position throughout the plant. From this job analysis review, I determined, in conjunction with the managers at AK Steel, what knowledge, skills and abilities were important for adequate job performance. I then selected a compilation of tests that would measure for these required abilities.

5. The test I developed included (1) a pattern series test of abstract reasoning because the job analysis revealed that employees must think logically in terms of cause and effect so they can properly diagnose production problems with either the product or the production equipment and can exercise good judgment in making decisions that might have a direct effect on their own lives and those of their co-workers, as well as on the product and company profitability; (2) a mechanical reasoning test because the job analysis revealed that employees must independently troubleshoot mechanical and electrical problems with production machinery, perform maintenance work involving complex interlocking and/or interrelated electronic circuits and tear down, repair and reassemble intricate equipment essential to the production process, (3) a math test for industry because the job analysis revealed that employees must understand temperature, product measurements and equipment controls all of which are based on numerical scales, use numerically controlled machine tools and use addition, subtraction, division, multiplication and other mathematical functions in order to acquire the

level of knowledge in chemistry, hydraulics and electronics necessary for adequate job performance; (4) a reading test for production workers because the job analysis revealed that employees must read, study, understand and apply Quality Standard Operating Procedures which detail the requirements and procedures for the different job positions, as well as Job Health and Safety Analyses, which detail proper protection and safety procedures, other written information pertaining to coil characteristics and the order of production and texts pertaining to principles of chemistry, hydraulics and electronics; (5) a 3-D visual spatial reasoning test and a form pattern comprehension test because employees must attend to the spatial relationship between the employee, the product and the production equipment, conduct manual machine set-ups and take apart and reassemble intricate machinery and production equipment; and (6) an industrial personal style inventory. The personal style inventory measured an employee's conscientiousness and attention to detail, motivation and work drive, emotional stability (maturity/levelheadedness), openness to experiences (due to the need to learn how to work in a variety of positions), extroversion (ability to communicate with and work in a cooperative team environment) and agreeableness (willingness to learn and work under high stress).

6. I conducted both a predictive and concurrent validation study. I determined that a criterion related validity study was feasible.

7. After developing the test based on the job analyses, we conducted a concurrent validity study. We tested on-the-job employees to ensure the test correlated with actual job performance. Managers were instructed to provide performance ratings on the various criterion measures. AK Steel identified managers who would have sufficient knowledge to provide accurate performance ratings for each tested employee. The managers used a standard performance rating form with a defined scale to rate 13 performance dimensions. Employees

were then tested. I analyzed and compared the test scores with the actual on-the-job performance ratings for 76 employees. Each of the tests demonstrated significant correlation with several of the criterion measures. I also analyzed the personality measures and determined that all dimensions were shown as valid predictors of at least one criterion measure. I concluded that each of the aptitude tests was shown to be a valid predictor of job performance and all of the personality measures also validated. I concluded that the tests were a valid predictor of job performance. I examined the relationship between the selection procedures and the criterion measures using professionally acceptable statistical procedures and determined that there was a statistically significant relationship between the selection procedure and job performance. The correlation was quite strong.

8. In 1999, after AK Steel had been using Resource Associates' test for two years, I performed a predictive validation analysis for AK Steel. I analyzed the actual test scores of 189 individuals who had been hired using the test with their on-the-job performance ratings. The 189 individuals constituted an appropriate representative sample of the candidates based on the type of candidates normally available in the surrounding labor market. Once again, AK Steel's human resources group identified supervisors who could accurately rate the employees' performance and provided them with the same performance rating form. This analysis again confirmed the earlier concurrent study, revealing solid empirical evidence that the test scores were good predictors of future job performance. Validity coefficients ranged from .23 to .36. There was also a strong pattern of validity coefficients for the personality measures. I concluded the test was valid. As part of the study I reviewed the impact of the study on minority groups. I reviewed the test for fairness and determined that in my professional opinion there were no

alternative aptitude tests that would be as valid as the ones being used which would have any less adverse impact.

I declare under penalty of perjury that the foregoing is true and correct.

Signed this 10 day of January, 2008.

Lucy Gibson